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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/084,981	03/01/2002	Stefan Jansen	1076.41311X00	2225

20457 7590 05/13/2004

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EXAMINER	
WIMER, MICHAEL C	

ART UNIT	PAPER NUMBER
2821	

DATE MAILED: 05/13/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action	Application No.	Applicant(s)	
	10/084,981	JANSEN, STEFAN	
	Examiner	Art Unit	
	Michael C. Wimer	2821	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 27 April 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

PERIOD FOR REPLY [check either a) or b)]

a) ☒ The period for reply expires 4 months from the mailing date of the final rejection.

b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.
ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on _____. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.

2. ☐ The proposed amendment(s) will not be entered because:

   (a) ☐ they raise new issues that would require further consideration and/or search (see NOTE below);

   (b) ☐ they raise the issue of new matter (see Note below);

   (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or

   (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

   NOTE: _____.

3. ☐ Applicant's reply has overcome the following rejection(s): _____.

4. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

5. ☒ The a)☐ affidavit, b)☐ exhibit, or c)☒ request for reconsideration has been considered but does NOT place the application in condition for allowance because: *See Continuation Sheet*.

6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.

7. ☒ For purposes of Appeal, the proposed amendment(s) a)☐ will not be entered or b)☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

   The status of the claim(s) is (or will be) as follows:

   Claim(s) allowed: *None*.

   Claim(s) objected to: *5-8,13-16,21-24 and 29-32*.

   Claim(s) rejected: *1-4,9-12,17-20 and 25-28*.

   Claim(s) withdrawn from consideration: *None*.

8. ☐ The drawing correction filed on _____ is a)☐ approved or b)☐ disapproved by the Examiner.

9. ☐ Note the attached Information Disclosure Statement(s)(PTO-1449) Paper No(s). _____.

10. ☒ Other: *See Continuation Sheet*

Michael C. Wimer
Primary Examiner
Art Unit: 2821

Continuation of 5. does NOT place the application in condition for allowance because: Applicant's arguments are directed to semantics, emphasizing that the antenna of Annamaa shows "multiple antenna elements" and not an "element" as defined in applicant's specification, page 1, lines 23-25. Unfortunately, the "definition" or suggestion cited here is a mere example of what an element can be, as opposed to a "generic reference". Interpretation of applicant's citation in the specification merely tells the skilled artisan that an element is to be considered a building block, in the electrical sense, of an antenna. Parasitic elements and a dipole element in a Yagi-Uda array certainly may contain a plurality of elements, portions, regions, etc., and still be deemed an "element". A dipole element in a 2-element Yagi-Uda array may be constructed of telescoping tubes, or elements and two separate sections of quarter wavelength sections, or elements, fitted together and secured on a boom. Furthermore, a trap-dipole antenna element is an element, but is made up of a plurality of elements, e.g., wire, tubes, traps, dielectric coverings, etc.

The final Office action rejection, and in the response therein (cited as the last paragraph on page 2 of applicant's current REMARKS) made it clear that the element is defined, as in applicant's invention, and comprised of the multiple conductor patterns. The completed antenna, however, includes the ground plane beneath the patterns. That collectively defines the antenna. Thus, the premise for the rejection does not "erroneously define the whole antenna as an element" as alleged, currently in applicant's REMARKS. The reading of Claim 1, for example on Annamaa et al is not contrary to the word "element", which is not that specific in applicant's specification.

Applicant attempts to define "element" in a certain, limited use to be defined by the claims. However, page 1 of the specification first makes reference to "elements" regarding the elements in the cited references in line 14. And, line 18 recites "said element", where the antecedent basis is uncertain. It appears to refer back to or relate to the elements in the cited references of line 13-14. The US Pat. No. 5898404, cited in line 13 shows multiple conductors on separate substrates, as in the patent to Annamaa et al. Any line of distinction between applicant's definition, and any patentee's definition in the specification citation and in the rejection is blurred. As an additional example, page 4 of applicant's specification, lines 28-29 state that regions 43b-h collectively form the radiating element of the antenna 14. These regions are portions or elements of an antenna element, which requires the ground plane portions or elements 41a-h. Therefore, elements make up an antenna element and adding ground plane structures defines an antenna.

Applicant's "definition" or suggestion here, does not necessarily provide any guidance as to the structural makeup of an element in order to define over any elemental building block of an antenna. Perhaps it can only be thought of in an "electrical sense" (e.g., as defining an electrical entity and not necessarily in a physical sense as in a plurality of interconnected tubes, telescoping inside each other in order to define a dipole element, which is an electrical component of an antenna or solely defining an antenna).

Regarding applicant's remarks of the Annamaa et al structure, the use of the word "element" to designate distinctive patches above a ground plane to resonate at differing frequencies, does not preclude the use of such a structure as collectively being defined and called an "element". Although applicant may be his own lexicographer, the Office is required to use the broadest reasonable interpretation of a claim (see MPEP 2111). The claim at issue, for example Claim 1, merely recites an element included in an antenna structure made up of a plurality of conductor patterns on a plurality of layers of a multilayer PCB, stacked and interconnected through the PCB. The claim is silent as to the feeding arrangement and requires only that the patterns be connected. That is precisely what Annamaa et al show with respect to conductor patterns of layers of a multilayer PCB, stacked and interconnected as set forth in the final Office action in the anticipation rejection. Although Annamaa et al state and use the term first radiation element 220 and second radiation element 230 in Fig. 2, the entire structure may be deemed an antenna element. If such a structure was packaged, bought off-the-shelf, the user knows that such a package is an element. He knows nothing of the intricacies of the construction of the antenna inside the package. Applicant is defining his invention as an antenna comprising an "element". But, that element has a plurality of other elements, as patterns disposed on separate planes of a substrate and connected together. Once connected together, the entity may be defined as an element.

Regarding applicant's remarks as to the term "multiplayer PCB", any structure comprising a plurality of substrates, layered and defining an entity as shown in the prior art may be deemed to define such a term.

Since the structure claimed is shown in the prior art of record, the rejected claims are not seen to patentably define thereover.

The rejection stands.

Continuation of 10. Other: Attachments: PTO-1449 (filed 12/23/03), two sheets; PTO-1449 (filed 04/27/04) two sheets.